GFE Job Sheet 4: Manipulating the Grids in the Grid Manager

Objective

This job sheet will familiarize the user with the many ways to manipulate grid blocks within the Grid Manager.

Procedure

NOTE: You should use the Temperature element during the course of this exercise unless otherwise specified.

A. Expand a Grid's Valid Time Period

Purpose: To expand a grid's temporal range.

1. In the Grid Manager, *press and hold both mouse buttons* over a grid block.

2. While holding down *both mouse buttons*, *drag the cursor to the left or right* until you see the grid block stretch.

3. *Release the mouse buttons* when the desired valid time period is achieved.

Grid code letters appear inside each grid block. Here is an explanation of some of the more common codes:

m = Edited by the current user (modified grids)
o = Edited by other (previous or official forecast)
I = Interpolated grids
i = Initialized grids
E = ETA initialized grids
A = AVN initialized grids
M = MOS, MRF or MesoEta initialized grids
N = NGM initialized grids
R = RUC initialized grids

B. Split a Grid's Valid Time Period

Purpose: To split a grid into two or more separate grids.

1. Select a time range that only covers a portion of the grid block.

2. Select *Grids* from the main menu bar.

3. Select *Split Grids*. Depending upon the valid time period of the grid, you may be able to split the grid several times. Splitting of grids will cease when they are in their smallest possible parts.

OR

1. Position the cursor over the grid block at the point that you want to split it. *Right Click* to bring up the pop-up menu, and choose *Split Grid.* You can continue to split the grid block until it is in its smallest possible unit.

C. Fragment a Grid's Valid Time Period

Purpose: To fragment a grid into its smallest temporal parts.

NOTE: You might want to choose a different element, like Wx for this exercise since not all grids can be fragmented.

1. Select a grid block using the *left mouse button*. The grid block will become blue hatched.

2. Select *Grids* from the main menu bar.

3. Select *Fragment Grids*.

OR

1. After going though the pervious step 1, *click the right mouse button* over this selection within the Grid Manager.

2. Select *Fragment Grid.* The single grid block will be fragmented into its smallest possible parts.

D. Delete Grids

Purpose: To delete grids.

1. Select a grid block using the *left mouse button*. The grid block will become blue hatched. You

may select any weather element and time range to be deleted.

2. Select *Grids* from the main menu bar.

3. Select *Delete Grids*. The entire grid block will be deleted.

OR

1. Click the *right mouse button* over the selection within the Grid Manager.

2. Select *Delete Grid*. Note that this will only delete one grid block at a time even though you may have selected a time range covering many grid blocks. Just keep choosing Delete grid until all of the grid blocks are deleted.

E. Interpolate Grids

Purpose: To fill in the gaps between grid blocks.

1. Select any time range and weather element that has gaps between the grids with the mouse by holding down the left mouse button and sweeping horizontally over a time range in the grid manager.

2. Select *Grids* from the main menu bar.

3. Select *Interpolate*. The following window should appear:

4. From the Interpolate pop-up window, select *Gaps*, and click *OK*.

Interpolation by gaps will calculate new grids only for gaps in the data, and will use the grids in the selected time range to interpolate the new grids.

Interpolation based on edited data will calculate new grids for not only gaps but also for unedited grids. Interpolation based on edited data will use only the modified grids to calculate new grids.

F. Copy and Paste Grids

Purpose: To copy a grid from one time period to another.

1. Make sure that there is a weather element with at least one grid block and one gap visible.

2. Press and hold the *right mouse button* over the grid block you wish to copy.

3. Select *Copy Grid* from the pop-up menu.

4. *Move the cursor over another grid block or a gap* and press and hold the *right mouse button*.

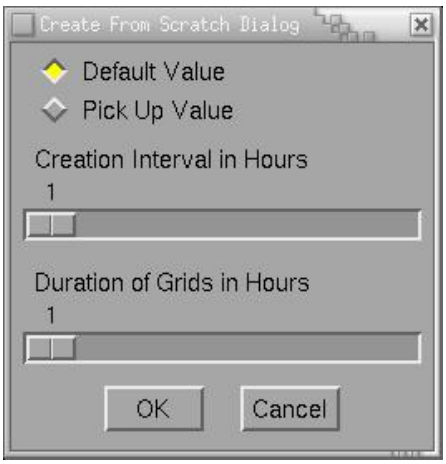
5. Select *Paste Grid.*

G. Creating a Grid From Scratch

Purpose: To create a brand new grid.

1. Press and hold the right mouse button over a gap in the desired weather element.

2. Select *Create From Scratch* from the pop-up menu. The newly crated grid value is the Default Value. You can change the default by selecting Grids from the menu bar, then selecting the Create Grids from Scratch option. The following window will appear:



H. Time Shift

Purpose: To move or copy a grid forward or backward in time.

1. Select a time range and a weather element.

2. Select *Grids* from the main menu bar.

3. Select *Time Shift* from the pull-down menu.

4. Select *Copy* if you want to copy the desired grid(s). Select *Move* if you want to move the desired grid(s).

5. Adjust the *slider bar* to the number of hours you wish to copy/move the selected grids either forwards (positive hours), or backwards (negative hours).

6. Click *OK*.